

PRAT, Vladimir; BENESOVA, Dagmar; DEJDAR, Rudolf; CERVINKA, Frantisek
Technicka asistence: CAPKOVA, E.; DVORAKOVA, J.; KRAUSOVA, E.;
LANKISCH, A.

Experimental pyelonephritis. IV. Effect of dynamic disorders of
the ureter on renal excretion of E. coli in rabbits. Cas.lek.cesk.
99 no.44:1383-1389 28 0 '60.

1. Ustav pro choroby obehu krevniho v Praze-Krci, reditel akademik
Klement Weber. - Katedra patologicke anatomie a mikrobiologie
fakulty detskeho lekarstvi Karlovy university v Praze, prednosta
doc. MUDr. Dagmar Benesova. - Ustav pro klinickou a experimentalni
chirurgii v Praze-Krci, reditel prof. MUDr. Bohumil Spacek.
(ESCHERICHIA COLI INFECTIONS exper)
(PYELONEPHRITIS exper)

CERVINKA, Frantisek

Jaroslav Jiranek's book on Vit Nejedly. Vestnik CSAV 70
no.5:744-748 '61.

PRAT, Vladimír; BENESOVA, Dagmar; CERVINKA, František; Technická spolupráce
CAPKOVA, E.; DVORAKOVA, J.

Experimental pyelonephritis. VI. Relation between temporary ischemia
of the kidney and hematogenic colibacillus infection in rabbits. Cas.
Lek. Cesk. 101 no.12:361-366 23 Mr '62.

1. Ustav pro choroby obehu krevniho v Praze, reditel akademik K. Weber.
Katedra patologické anatomie a mikrobiologie fakulty lékařského
KU v Praze, přednosta doc. dr. D. Benesova. Ustav pro klinickou a
experimentální chirurgii v Praze, reditel prof. dr. B. Spacek.

(PYELONEPHRITIS exper) (KIDNEY blood supply)
(ESCHERICHIA COLI INFECTIONS exper)

"PRAT, V.; BROD, J.; BENESOVA, D.; DEJDAR, R.; FENCL, V.; HORAK, O.;
CERVINKA, F.; KRATOCHVILLOVA, J.; PAVKOVA, L.

Research on chronic pyelonephritis during the first ten years of the
Institute for Cardiovascular Research. Rev. czech. M. 8 no.2:
113-123 '62.

1. Institute for Cardiovascular Research, Prague; Director: Academician
K. Weber, Department of Morbid Anatomy and Microbiology, Faculty of
Paediatrics, Charles University, Prague; Head: Doc. Dr. D. Benesova,
Institute of Clinical and Experimental Surgery, Prague; Director:
Prof. Dr. B. Spacek.

(PYELONEPHRITIS statistics)

KOCVARA, S.; HAHN, M.; CERVINKA, F.; ZAK, F.; HATALA, M.

Bacteriological examination in chronic prostatitis. Rozhl.
chir. 42 no.5:321-326 My '63.

1. Ustav klinicke a experimentalni chirurgie v Praze, reditel
prof. dr. B. Spacek, DrSc. II patologickoanatomicky ustav
fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr.
V. Jedlicka.

(PROSTATITIS) (STAPH INFECTIONS)
(STREPTOCOCCAL INFECTIONS)
(STREPTOCOCCUS FAECALIS)

CERVINKA,F.; KRAJICEK,M.; LISKA,M.; VRUBEK,J.

Notes on the question of the antigenicity of collagen. Folia
biol. (Praha) 10 no.2:94-97 '64.

1. Institute of Clinical and Experimental Surgery, Prague.

*

CERVINKA, F.; LISKA, M.; VRUBEL, J.

Alteration of experimental lymphedema with corticosteroids and antihistaminics. Cas. lek. cesk. 103 no.28:797-799 | 6 Ji'64

1. Ustav klinicke a experimentalni chirurgie v Praze; reditel: prof. dr. B.Spacek, DrSc.

GERVINKA, F. Technická spolupráce HNATEK, J.

Biological effectiveness of chlortetracycline and other antibiotics in damaged muscle. Rozhl. chir. 44 no.5:321-325 My'65.

1. Ústav klinické a experimentální chirurgie v Praze (ředitel: prof. dr. B. Spacek, DrSc.).

VRUBEL, J.; LISKA, M.; CERVINKA, F.; PAVLIK, F. Technicka spoluprace:
KOLKOVA, M.; VANICEK, J.

The influence of lymphatic fistulae on the development of trans-
plantation immunity. Rozhl. chir. 44 no.5:348-350 1965.

1. Ustav klinicke a experimentalni chirurgie v Praze (reditel:
prof. dr. B. Spacek, DrSc.).

CERVINKA, J.

JOURNAL ARTICLE (Condensation)

Source: Engineers' Digest, January, 1958, Vol 19, Nr 1, pp 13-14

Author: J. Cervinka

Title: New Sensing Device for Thermal Protection

(Original Source: Elektrotechnicky Obzor, Vol 46, Nr 11, 1957, pp 597-600
7 illustrations.)

KOLOMBO, St., inz. (Tanvald); CERVINKA, J. (Tanvald)

Noncontact pickup of axial movements of rotating bodies.
Energetica Cz 13 no.8:446-447 Ag '63.

CERVINKA, Jiri, inz.

Remarks on factors affecting the thermal conductivity of refrigerator car insulation. Prum potravin 15 no.1:34-36 Ja'64.

1. Zavody Vitezneho unora, n.p., Vyzkumny ustav stroju chladicich a potravinarskych, Praha.

KOLOMBO, Stanislav, inz.; CERVINKA, Josef

Measurement of the shifting of steam turbine rotors and protection against its dangers. Energetika Cz 12 no.5:234-241 My '62.

1. Vyzkumny ustav energeticky, Tanvald.

KOLOMBO, S., inz.; CERVINKA, J.

Device for protecting the turbine in case of excessive displacement or elongation of rotor or stator.

Strojirenstvi 12 no.8:617-619 Ag '62.

1. Energeticky ustav, Tanvald.

BERGSTEIN, A.; BURDA, E.; CERVINKA, L.

High-temperature X-ray chamber. Silikaty 7 no.1:61-63 '63.

1. Ustav technicky, Ceskoslovenska akademie ved, Praha.

L 18810-66

EWI(1)/I/EWP(t)

IJP(c)

JD/HW/GG

ACC NR: AP5015930

SOURCE CODE: CZ/0055/65/015/006/0425/0427

AUTHOR: Cervinka, L.

ORG: Institute of Solid State Physics, Czechoslovak Academy of Sciences, Prague

TITLE: Comparison of ^{21, 44, 55}lattice vibrations in nickel- and manganese-ferrite single crystals

SOURCE: ¹⁶Czechoslovatskiy fizicheskiy zhurnal, v. 15, no. 6, 1965, 425-427

TOPIC TAGS: ferrite, manganese, nickel, crystal, ^{crystal lattice}vibration, *single crystal, polycrystal, x ray measurement*

ABSTRACT: X-ray measurements of the mean square amplitude of lattice vibrations made previously on several kinds of polycrystalline ferrospinel materials and on the cubic part of the system $Mn_xFe_{3-x}O_4$ were repeated in a recent experiment on single crystals of the composition $Mn_{1.66}Fe_{1.33}O_4$ and $NiFe_2O_4$. The greater value of the mean square amplitude obtained for Mn-ferrite is consistent with results on polycrystalline samples, and is a further confirmation of the existence of local Jahn-Teller distortion in manganese ferrite. The graph of characteristic differences between manganese and nickel ferrite is presented. The author thanks Dr. K. Toman of the Institute of Macromolecular Chemistry for valuable advice, Dr. S. Krupicka of the Institute of Solid State Physics for helpful discussions, Dr. A. Linek of the same Institute for help in preparing the computer programs, and Mrs. A. Dobrovska for measurements and evaluations. Orig. art. has: 1 figure. [Based on Author's Abstract.]

Cord 1/2

[JKP]

L 18810-66

ACC NR: AP5015930

SUB CODE: 20/ SUBM DATE: 14Dec64/ OTH REF: 004/

CERVINKA, E.

Time schedule for assembling operations of the 12 MW turbine. p. 117.
STROJIRENSKA VYROBA, Praha, Vol. 3, no. 3, Mar. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

✓ Split-plate distillation column. M. Cervinka and O.
Cerný. *Chem. Průmysl* 5, 232 (1955). Relationship
between geometric design of the plate and loading of the
column was studied on test columns 100 mm., 250 mm., and
125 mm. in diam. A math. correlation of exptl. data found
is attempted. L. A. Helrich.

①

MA
JES

Z/009/60/010/05/010/040
E142/E135

AUTHOR: Max Červinka

TITLE: Solubility of Chlorine in Benzene and Chlorobenzene¹

PERIODICAL: Chemický Průmysl, 1960, Vol 10, Nr 5, pp 249-251

ABSTRACT: Available literature data only give the solubility of chlorine in benzene at 20 °C when the relevant Henry constant $H = 3.8 \times 10^3$ mm Hg. The author determined this constant at different temperatures and also carried out experiments on the solubility of chlorine in chlorobenzene so that values for the solubility in a mixture of benzene-chlorobenzene for various temperatures could be determined by interpolation. Benzene and chlorobenzene, purified by rectification on a 20-plate column, was used during the experiments: the fractions had constant boiling points. The solubility was determined by the dynamic absorption method. A Balej and Regner apparatus was used. The temperature of the absorption liquid was maintained with an accuracy of ± 0.5 °C; photo-chlorination was prevented by coating the apparatus with a dark red lacquer. Graphs in Figs 1-3 show the dependence of the solubility on the

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E142/E135

Solubility of Chlorine in Benzene and Chlorobenzene

concentration of the gas. The corresponding partial pressures of chlorine were calculated from the composition of the gas. Table 1 gives values of the Henry constant, calculated from experimental data by the method of least squares. From the obtained experimental results it is also possible to calculate the mean molar heats of solubility for chlorine for temperature limits between 20 and 70 °C.

Card
2/2

There are 4 figures, 1 table and 3 references, of which 2 are Czech and 1 is Soviet.

ASSOCIATION: Výzkumný ústav organických syntéz, Pardubice-Rybitví
(Research Institute for Organic Syntheses,
Pardubice-Rybitví)

SUBMITTED: April 24, 1959

CERVINKA, Max; EICHLER, Jan...

Monogram for computation of vapor velocity in a rectifying column.
Chem prum 12 no.1:24-25 Ja '62.

1. Vyskumny ustav organickych syntez, Pardubice-Rybitvi.

CERVINKA, Milos

Improving the thermal relations of metallothermic melts. Hut listy
16 no.9:622-629 S '61.

1. Vyzkumny ustav hutnictvi selesa, Praha.

L 3113-66 EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5026881

CZ/0034/65/000/006/0394/0400

AUTHOR: Cervinka, Milos (Engineer); Karnovsky, Milos (Engineer)

TITLE: Ways of refining ferro-silicon 27

SOURCE: Hutnicke listy, no. 6, 1965, 394-400

TOPIC TAGS: ferroalloy, silicon, metal melting

ABSTRACT: Nitrogen is not a suitable agent for refining ferro-silicon, as it does not remove Al; fluorspar, air, and quartz sand behave in a similar way. Very large amounts of these agents would be required to remove limited amounts of aluminum, and substantial deposits would form in the metal. Oxygen, when used, burns off too large amounts of silicon. Limestone and Mg compound are the most promising agents. At present the most frequently used agents are: Cl, CO₂, synthetic slags, acid lining of the furnaces, and the so-called combined technique. Orig. art. has: 9 tables, 6 graphs, 1 figure.

ASSOCIATION: VUHZ, Prague

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NR REF SOV: 008

OTHER: 015

JPRS

Card 1/1 PC

L 38867-66 EWP(t)/ETI IJP(c) JD

ACC NR: AP6029558

SOURCE CODE: CZ/0057/65/000/011/0481/0485

AUTHOR: Cervinka, Milos

34
B

ORG: Research Institute for Iron Metallurgy, Prague (VUHZ)

TITLE: Production of complex Fe-Mn-Si-Al deoxidizers 6

SOURCE: Hutnik, no. 11, 1965, 481-485

TOPIC TAGS: iron alloy, manganese alloy, silicon alloy, aluminum alloy, alloy composition, arc furnace, metallurgic process

ABSTRACT: Production of deoxidizers similar to the US Simanal type was investigated. 13 alloys were produced: Type 1 containing 60% Mn, 15% Si, 10% Al, balance Fe; Type 2 containing 35% Mn, 35% Si, 7% Al, balance Fe; Type 3 containing 18% Mn, 18% Si, 18% Al, balance Fe. Alloy type 1 is easily produced by aluminothermic methods, using ordinary raw materials; its use resulted in Mn yields from ore of above 90%. Types 2 and 3 must be produced in an arc furnace; the induction furnace should operate at about 2400 cycles. Conditions for preventing the decomposition of the alloy Type 2 are discussed. [JPRS: 34,519]

SUB CODE: 11 / SUBM DATE: none / ORIG. REF: 003 / SOV REF: 001

Card 1/1

CERVINKA, O.; KOZMAL, F.

Pulping possibilities of eucalyptus wood. p. 196

PAPIR A CELULOZA. (Ministerstvo lesu a drevarského průmyslu) Praha,
Czechoslovakia. Vol. 14, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAI) LC, vol. 9, no. 1,
Jan. 1960

Unc.

CERVINKA, Oliver, inz.

Pulping waste, a raw material for furfural production. Papir
a celuloza 18 no.8:161-162 Ag'63.

1. Vychodoslovenske celulozky a papierne, Hencovce.

CERVINKA, Oliver, inz.; KASTIEL, Kazimir, inz.; SUTY, Ladislav, inz.

Use of ultraviolet absorption spectrophotometry in the
cellulose industry. Pt.3. Papir a celuloza 19 no.2:36-38 F'64.

1. Vychodoslovenske celulozky a papierne, Hencovce (for
Cervinka, and Kastiel). 2. Katedra chemickej technologic
dreva a chemickych vlaken, Slovenska vysoka technicka,
Bratislava.

CERVINKA, O.

LUKES, R., CERVINKA, O.

"Preparation of Salts of Stachydrinol and N-Methyl-Prolinol from Piperidine," p.392.
(Chemické Listy, Vol.47, No.3, Mar. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol.2, No.9, Library of Congress, September
1953, Uncl.

CERVINKA, C.

LUKES, R. ; CERVINKA, C.

"N-methylprolinol (N-methylpyrrolidine). Pt. 2." p. 1027.
(Chemické Listy. Vol. 47, No. 7, July 1953, Praha.)

SO: Monthly List of East European Accessions, Vol. 3, No. 3, /Library of Congress, March 1954, Uncl.

CERVINKA, O.

Stereochemical process of the addition and elimination reactions.

P. 539 (Chemie) Vol. 9, No. 4, Aug. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

Cervinka, O

"Conditions of optical activity.

p. 637 (Chemie, Vol. 9, no. 5, Nov. 1957

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958

~~OTAKAR~~, CERVINKA, O.

CZECHOSLOVAKIA/Organic Chemistry - Synthetic Organic Chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46715

Author : Otakar Cervinka, Frantisek Kavka

Inst : -

Title : Reduction of 5-Nitroso-2-Oxytoluene.

Orig Pub : Chem. listy, 1957, 51, No 8, 1517-1520

Abstract : Dilute H_2SO_4 is added drop by drop to an aqueous solution of Na-o-cresolate containing $NaNO_3$ and cooled to -5° , and CO_2 is passed through at the same time; 5-nitroso-2-oxytoluene (I), melting point 133 to 134° , is obtained at a 63%-ual yield. 5-Amino-2-oxytoluene (II), melting point 174° , is produced by the reduction of I on Pt in CH_3OH at about 20° at a 37%-ual yield. II can be prepared also by the reduction of I with H_2S in 25%-ual NH_4OH at 45 to 50° (50%), or by the reduction of I with Sn and HCl acid (82%). At acetylation,

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CZECHOSLOVAKIA/Organic Chemistry - Synthetic Organic
Chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46715

or formylation carried out by the usual method, 5-acetylamino-2-oxytoluene (III), melting point 179° (from water); or 5-formylamino-2-oxytoluene, melting point 148.5 to 149° (from water), are produced correspondingly. A mixture hydrochlorides obtained by the reduction of 42.5 g of I with 67.5 g of powdered Fe in 330 ml 33% -ual HCl acid is converted into a mixture of bases (51 g) with Na_2CO_3 . This mixture is separated in a mixture of 65 ml of CH_3COOH and 450 ml of water based on different solubility. The soluble fraction produces 10.7 g of III being acetylated with $(\text{CH}_3\text{CO})_2\text{O}$. The insoluble fraction is identified as 5-amino-4-chloro-2-oxytoluene (IV), melting point 205° (dissociates; from water), after purification through hydrochloride; N-acetyl derivative, melting point 164° (from water). 5-Chloro-2-methyl-1,4-benzoquinone, melting point 105°

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CZECHOSLOVAKIA/Organic Chemistry - Synthetic Organic
Chemistry.

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Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46715

(from alcohol), is produced at the oxidation of V with MnO_2 in dilute H_2SO_4 . 85 g of III is heated with 45 g of Raney's nickel in 750 ml of CH_3OH 4 hours and filtered off, evaporated to 500 ml, 10 g of fresh catalyst is added and all is hydrogenated 25 hours at 165 to 185° under the initial pressure of 123 at. and 40 hours more at 240 to 250°. The following is obtained: 10.75 g of 2-methylcyclohexanol, boiling point 57 to 61°/8 mm, $n_{\text{D}}^{20} = 1.4621$; 13.2 g of 5-dimethylamino-2-methoxytoluene, boiling point 109 to 120°/8 mm; [picrate, melting point 173° (from alcohol); iodomethylate, melting point 206° (from alcohol); hydrochloride, melting point 165 to 166° (from Alcohol)]; and 8.7 g of a substance with the boiling point at 92 to 95°/0.2 mm and alkaline reaction. Trimethylamine, picrate, melting point 220 to 221° (from water) was found also in the

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CZECHOSLOVAKIA/Organic Chemistry - Synthetic Organic
Chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46715

hydrogenation products! 4.5 g of 4-acetylamino-2-methylcyclohexanol, melting point 180.5 to 181.5° (from acetone) and two unknown substances with boiling points at 73 to 75°/0.35 mm (150 ml) and 140 to 155°/0.3 mm (400 mg) are received by hydrogenation of 10 g of III on 1 g of Raney's Co in 95 ml of alcohol in the duration of 90 min. at 170 to 180° and under 100 at. of initial pressure.

Card 4/4

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64493.

Author : Lukes Rudolf, Cervinka Otakar

Inst :

Title : Synthesis of 4-Hydroxy-Methyl-Chinolicidine

Orig Pub: Chem. listy, 1957, 51, No 11, 2086-2089.

Abstract: To a solution of Grignard reagent (from 96.5 g. of 5-bromopentene-1 and 17.3 g. of Mg in 400 ml. ether), is added a solution of 49 g. of 1-methyl piperidone-2 in 20 ml. of ether. After boiling for 4 hours, there is precipitated during 12 hours 23.5 g. of 1-methyl-2-(pentenyl-4)-1,4,5,6-tetrahydropyridine (I), b.p. 100-104°/15 mm, along with 8.2 g. of impure 1-methyl-2-2-di(pentenyl-4)-piperidine (II); m.p. of picrate 103° (in aqueous alcohol). From the picrate is precipi-

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64493.

tated the free base of (II), b.p. 145°/13 mm.
Hydrolyzing the hydrochloride of (I) over PtO₂ in water leads to 1-methyl-2-amylpiperidine, b.p. 91-92°/14mm, m.p. of picrate 108° (in aqueous alcohol; m.p. of picrolonate 117-118° (in water). Substituting HCOOH, and also electro-reducing, leads to the selective reduction of only the double bond in the piperidine ring. 1-methyl-2-(pentenyl-4)-piperidine (III), b.p. 91.5°/15 mm, n_D²⁰ 1.4648, is synthesized from 23.5 g. of (I), 71 g. of HCOOK and 71 g. of 98% HCOOH (150-155°, 6 hours), distilling the base from an alkaline solution with steam; m.p. of picrate 84.5°. Upon the electro-reduction of (I) in 20% H₂SO₄ at 12 volts and 1 ampere, (III) is produced. From 6.8 g. of (III) in 15 ml. of 48% HBr and 2.1 ml Br, and after cooling,

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64493.

18 g. of the bromohydrate of 1-methyl-2-(4,5-dibromopentyl)-piperidine (IV) are produced, m.p. 137-139°. Upon the heating (80°, 4 hours) of an aqueous solution of (IV) and Ag₂O, after neutralization with HBr acid and the addition of picric acid Na, there is produced picric acid N,4-dimethyl-1,2,5,6,7,8,9,10-octahydrochinolizidine (V), m.p. 222° (in water). From 1 g. (V) by means of conc. HCl, there is synthesized the corresponding chloromethylate, the hydrogenation of which (~20°, 760 mm) over PtO₂ gives the picric acid N, 4-dimethylchinolizidine, m.p. 243-244° (in alcohol). The cyclization of (IV) with the aid of CH₃COOAg, without the separation of intermediate products, produces by direct means both diastereoisomeric 4-hydroxymethylchinolizidines. The mixture of 4 g. (IV) in 30 ml of

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64493.

water and 6 g. CH_3COOAg , left for 7 days, saturated with H_2S , produces a coagulate which is filtered off, acidulated with 3 ml. glacial CH_3COOH , and subjected to thermal decomposition by distilling under normal pressure. The distillate is alkalized, and the base distilled with steam to yield 1 g. 4-hydroxymethylchinolicidine, b.p. $81^\circ/0.5 \text{ mm}$, n_D^{20} 1.4909.

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CERVINKA, O.

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67525.

Author : Lukes R., Cervinka O.

Inst : Not given.

Title : Reduction of 1-Methyl -2-Alkyl- 1,4,5,6-Tetrahydropyridines with Formic Acid.

Orig Pub: Chem. listy, 1957, 51, No 11, 2142-2144.

Abstract: When a mixture containing 1 part of 1-methyl-2-alkyl-1, 4,5,6-tetrahydropyridines, 5 parts of 98% formic acid, and 5 parts of HCOOK is heated to 150-155° for 6 hours, 1 methyl-2-alkylpiperidines (I) are formed. Radicals are separated after alkalization of the reaction product followed by steam distillation, neutralization of the distillate with HCl (acid), and precipitation with sodium picrate.

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67525.

Abstract: Picrates are alkalized with NaOH and steam distilled. By the described method the following I compounds were obtained (given: alkyl group, yield in %, boiling point in °C/mm, melting point of the picrate in °C): CH₃, 91.2, 127/750, 240-241; C₂H₅, 94.5, 146-147/740, 174-175; n-C₃H₇, 95.8, 174-176/740, 111-112; n-C₄H₉, 96.8, 73-74/12, 87-88; n-C₅H₁₁, 92.2, 91-92/14 198; C₆H₅CH₂, 96.2, 124/13, 178-179.

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Cervinka, O.

7
 A new preparation of *N*-methylprolinol, Rudolf Lukel and Otakar Cervinka (Vysoká škola chem. technol., Prague). *Chem. listy* 51, 2144-5 (1957).—Hydrogenating 14 g. *N*-methylamide of 1-methyl-2-pyrrolicarboxylic acid (m. 91°) in 50 ml. AcOH and 15 ml. concd. HCl over 0.2 g. PtO₂ at normal conditions, adding 0.1 g. PtO₂ and 10 drops of 5 *N* FeCl₃ after half of the theoretical consumption, filtering the soln. after 100 hrs., and evapg. *in vacuo* gave 13.2 g. MeN(CH₂)₃CHCONHMe (I), m. 122-5°; *picrate*, m. 214°.

3
 Refluxing 13.2 g. I 15 hrs. with 200 ml. 1:1 HCl, evapg. *in vacuo*, adding 50 g. Ba(OH)₂, steam-distg., removing the Ba ion from the residue with H₂SO₄, and evapg. gave 9 g. MeN(CH₂)₃CHCO₂H·HCl, m. 188° (EtOH); *Et ester*

(II), b_p 71-2° (73.3% by treatment with HCl in EtOH). Adding 2 g. II to 0.7 g. LiAlH₄ in 75 ml. Et₂O, refluxing the mixt. 2 hrs., alkalizing with NaOH, steam-distg., neutralizing the distillate with HCl, evapg. *in vacuo*, liberating the base with NaOH, and extg. with Et₂O gave 1.2 g. MeN(CH₂)₃CHCH₂OH, b_p 62-3°; *picrate*, m. 173° (Ac-ORt); *stypmate*, m. 100° (H₂O).

M. Hudlíček

CZECHOSLOVAKIA / Organic Chemistry. Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 5, 1959, 8245.

Author : Cervinka, O., Kavka, F.

Inst : Not given.

Title : Reduction of 5-Nitroso-2-Hydroxy-Toluene.

Orig Pub: Collect. czechosl. chem. commun., 1958, 23,
No 6, 1090-1094.

Abstract: Sec RZhKhim, 1958, 46715.

Card 1/1

Country	: Czechoslovakia	G-2
Category	: Organic Chemistry. Synthetic Organic Chemistry	
Abs. Jour.	: Ref. Zhur.-Khimiya No. 6, 1959	19475
Author	: Lukes, R.; Cervinka, O.	
Institut.	:	
Title	: Synthesis of 4-Hydroxymethyl-Quinolizidine.	
Orig Pub.	: Collect. czechosl. chem. commun., 1958, 23, No 7, 1336-1340	
Abstract	: See RZhKhim, 1958, 64493.	

Card: 1/1

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and
Their Synthetic Analogues.

G-3

Abs Jour: Ref Zhur-Khim., No 24. 1958, 81784

Author : Cervinka O.

Inst : ~~Prague~~ *TECH. UNIV., PRAGUE*

Title : The Stereospecific Synthesis of DL-Pseudo-Heliotridane

Orig Pub: Chem. listy, 1958, 52, No 2, 307-310

Abstract: By the reaction of $\text{CH}_3\text{BrCOOC}_2\text{H}_5$ on 1-methyl-2-ethyl- Δ^2 -pyrroline (I), the ethoxycarbonyl group connects with the α -carbonyl group on the side chain. (See R. Zh Khim., 1958, 70863) The unseparated product was reduced stereospecifically with formic acid or NaBH_4 with the formation of erythro-DL- β -(N-methyl pyrrolydyl-2)-butyric ester, which was converted into

Card : 1/4

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and
Their Synthetic Analogues.

G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81784.

DL-pseudoisobutyridane, free from the presence of the diastereoisomer of heliotridane, by the reduction with HBr (acid), and by making the solution alkaline and cleaving the acetate radical. The ethyl ester of erythro DL-3-(N-methylpyrrolydyl-2)-butyric acid, $C_{11}H_{21}O_2N$ (II), b p. 98-100°C/11 mm., was synthesized by allowing I to react for 3 days with $CH_3BrCOCC_2H_5$ in dioxane and boiling for one hour, separating the oil that formed, heating the latter with 98% $HCOOH$, acidifying with HCl (acid), saturation with HCl (gas), boiling (for 1 hour) distillation and making it alkaline with soda ash; yield 43.9%. Erithro-DL-3-(N-methylpyrrolydyl-2)-butanol-1, $C_9H_{19}ON$, was obtained from II or from the bornyl ester by boiling with $LiAlH_4$ in

Card : 2/4

57

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and
Their Synthetic Analogues

G-3

Abs Jour: Ref Zhur-Khim. No 24, 1958, 81784

ether, b.p. 108-110°C./11 mm, picrate, m.p. 153-153.5°C. The product was heated to 130-135°C. with HBr (acid) in a welded tube for 4-5 hours, distilled, dissolved in water, left with Ag₂O for one day, filtered off, acidified with acetic acid and distilled; there was obtained a 41.7% yield of DL pseudoheliotridane, C₈H₁₅N; picrate, m.p. 233°C.; pycrolonate, m.p. 166-167°C.; metapicrate, C₁₅H₂₁O₂N₃, m.p. 268-269°C (with partial decomposition). Brom-acetic ester of (+)-borneol, C₁₈H₃₁O₂Br, b.p. 152-154°C./17 mm, $[\alpha]_D^{25} + 17.6^\circ$, was obtained by azeotropic esterification. Upon standing for one week with I in dioxane, by boiling the mixture and by boiling with NaBH₄ for 3 hours, erythro-β-(N-methyl pyrrolydyl-2)-butyric ester of borneol was obtained, C₂₇H₄₃O₂N.

Card : 3/4

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and
Their Synthetic Analogues.

G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81784.

b.p. 157-162°C/2 mm., $[\alpha]_D^{25} + 22.56^\circ$ (chloro-
form). The asymmetric synthesis does not take place
by the reduction, and the base obtained is optically
inactive. The prospective mechanism for the forma-
tion of pseudoheliotridane is given.

Card : 4/4

58

Country	: Czechoslovakia	G-2
Category	:	
Abs. Jour	:	45761
Author	: Cervinka, O.	
Institut.	: Ministry <i>Vysoká škola chem. technol. Prahy</i>	
Title	: The Reaction of Grignard Reagents with Cyclic Imino-Ethers	
Orig Pub.	: Chem Listy, 52, No 6, 1145-1149 (1958)	
Abstract	: The author has investigated the reduction and the action of RMgX on O-methylbutyrolactim (I), O-methylvalerolactim (II), and O-methylcaprolactim (III). The reduction of I, II, and III by LiAlH ₄ gives pyrrolidine, piperidine, and hexamethyleneimine, respectively. Piperidine is also obtained by the catalytic hydrogenation of II over PtO ₂ . The reaction of II with CH ₃ MgI gives 2-methyl- Δ^1 -piperidine (V). III and CH ₂ =CH(CH ₂) ₃ MgBr gives 1-aza-2-(4-pentenyl)-1-cycloheptene (VI) as	
Card:	1/4	

Country	:	GDR	G-2
Category	:		
Abs. Jour	:		45762
Author	:		
Institut.	:		
Title	:		
Orig Pub.	:		
Abstract	:	<p>well as (apparently) 1-methylamino-10-undecene-6-one (VII). 2-piperidone, yield 68.3%, bp 138°/14 mm, is obtained from cyclopentanone oxime in 5% oleum at 150°. The separation of free aminovaleric acid, which lactimizes on vacuum distillation, is more convenient. A boiling solution of 95 gms 2-piperidone (obtained by the vacuum distillation of aminovaleric acid) in 260 ml benzene is treated with 118 gms (CH₃)₂SO₄ over 4 hrs, the solution is stirred for 16 hrs over a</p>	

Country	: GDR	G-2
Category	:	
Abs. Jour	:	45761
Author	:	
Institut.	:	
Title	:	
Orig Pub.	:	
Abstract	:	water bath, and II is isolated after alkalization with 50% K_2CO_3 , yield 56.5%, bp 145-147°/740 mm, 43-44°/15 mm, and 34°/9 mm; picrate mp 107° (from alc). The application of a similar procedure to 2-pyrrolidone gives I, yield 30.9%, bp 115-118° (together with 10-4% N-methylpyrrolidone). A boiling solution of CH_3MgI (from 4.4 gms Mg) in 100 ml dibutyl ether is treated with 11.3 gms II and the mixture is refluxed for 8 hrs; steam distillation gives IV, yield 42.2%, bp 129-131°.

Card: 3/4

Country	:	GDR	G-2
Category	:		
Abs. Jour	:		45761
Author	:		
Institut.	:		
Title	:		
Orig Pub.	:		
Abstract	:	<p>picrate mp 121-122°. A similar procedure is used in the preparation of V, yield 43.1%, bp 62-63°/14 mm, n_D^{20} 1.4661, picrolonate mp 141°. The hydrogenation of V.HCl in water over PtO₂ gives 2-propylpiperidine, bp 51-52°/15 mm, hydrochloride mp 214° (from alc-ether), hydrobromide mp 211° (from alc-ether). 0.2 mol III in dibutyl ether (4-hr reflux) gives 8.2 gms VI, bp 110-113°/14.5 mm, n_D^{20} 1.4806, and 2.4 gms VII, bp 145°/18 mm, n_D^{20} 1.4730.</p>	

J. Plcsek

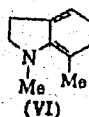
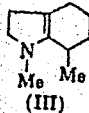
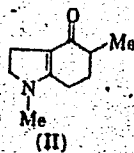
Card: 4/4

CERVINKA, OTAKAR

Distr: 4E3d/4E2c(j)

2. A transannular reaction in the enamine series. Otakar Cervinka (Inst. Chem. Technol., Prague). *Chem. & Ind. (London)* 1959, 1139.—Addn. of $\text{CH}_2=\text{CHCO}_2\text{Et}$ to 1-methyl-2-ethylidenepyrrolidine (I) [probably in the form of $\text{MeNH}(\text{CH}_2)_2\text{COEt}$] in dioxane gave $\text{OC}(\text{CH}_3)_2\text{CO}$.

$\text{NMe}(\text{CH}_2)_2$, b_p 125–8°, which underwent intramolecular cyclization to II (picrate m. 153–4°), which treated with HCO_2H gave the ring-satd. β -aminoketone, which cleaved to 2-methyl-6-(methylaminoethyl)cyclohexanone and recyclized to III, then was reduced to the ring-satd. compd. (IV), b_p 72–3° (picrate m. 174.5–5.5°). Dehydrogenation on IV on 25% Pd-asbestos gave 1,7-dimethylindole (V), b_p 122–5° (picrate m. 151–2°), which was also prepd. by reaction of I with acrolein, followed by dehydrogenation of the unsatd. base (VI), b_p 170°, on 5% Pd- Al_2O_3 in boiling mesitylene. Infrared spectrum of V, prepd. by both methods, were identical.



Card 1/1

Rip G. Rice
aht

199 (NA)
2

CERVINKA, O.; LUKES, R.

"Reduction of 1-methyl-2-alkyl-1,4,5,6-tetrahydropyridines with formic acid"
In German. p. 309.

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, Praha, Czech.,
Vol. 24, No. 1, Jan 1959

Monthly List of East European Accessions (EEAI), Lc, Vol. 8, No. 6, Sept. 59
Unclassified

COUNTRY : Czechoslovakia
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 1959, No. 96604
 AUTHOR : Laves, R.; Diensthierova, V.; Carvarka, O.
 INST. :
 TITLE : On the Reaction of Grignard Reagent with
 Perchlorate of 1-methyl-2-alkyl-²-
 Pyrroline
 ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24
 No 1, 428-436
 ABSTRACT : See RZKhim., 1959, No 15, 53420.

CARD:

145

COUNTRY : CZECHOSLOVAKIA G
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry
ABS. JOUR. : RZKhim., No. 1 1960, No. 1119
AUTHOR : Cervinka, O.
INST. : -
TITLE : Action of Grignard Reagents on Cyclic Imino-
Ethers
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,
No 4, 1146-1150
ABSTRACT : No abstract
See RZhKhim., No 13, 1959, No 45761.

CARD: 1/1

CERVINKA, O.

Inst. for Organic Chemistry

Enamines. III. Addition reaction of 1-methyl-2-alkyl- Δ^2 -piperideines¹ with acrolein¹ and ethyl acrylate. O. Cervinka (Vysoká škola chem. technol., Prague). Collection Czech. Chem. Commun. 25, 1174-82 (1960) (in German); cf. CA 52, 5381i, 11004c.---⁴
 Addn. reaction of 1,2-dimethyl- Δ^2 -piperideine (I) with AcCl and hydrogenation gave 1,2-dimethyl-3-acetylpiperidine (II). I and acrolein (III) gave 1-methylhexahydroquinoline (IV) with undetd. double bonds. Analogously, 1-methyl-2-ethyl- Δ^2 -piperideine (V) gave 1,8-dimethylhexahydroquinoline (VI). Dehydrogenation of IV and VI gave the 1-Me (VII) and 1,8-di-Me (VIII) derivs., resp., of 1,2,3,4-tetrahydroquinoline. I and Et acrylate (IX) gave a mixt. of 1,2-dimethyl-3-(β -ethoxycarbonyl-ethyl)- Δ^2 -piperideine (X), 1-methyl-2-(γ -ethoxycarbonylpropyl)- Δ^2 -piperideine (XI), and a compd. $\text{C}_{10}\text{H}_{15}\text{NO}$, probably 1-methyl-1,2,3,4,5,6,7,10-octahydro-7-quinolone (XII). Keeping 0.7 g. I, excess AcCl , and 5 ml. Et_2O 3 days at room temp., decanting the ethereal soln., dissolving the residue in EtOH , removing the unreacted I with NaClO_4 , hydrogenating the mother liquor on PtO_2 , filtering the catalyst, and pptg. the filtrate with satd. aq. Na picrate gave II picrate, m. 195-6° (H_2O). Keeping 0.9 g. I, 0.45 g. III, and 5 ml. anhyd. dioxane 24 hrs. at room temp. and distg. gave 0.5 g. IV, b_{10} 89-93°. Similarly, 4.6 g. V, 2 g. III, and 25 ml. dioxane gave 2.7 g. VI, b_{11} 97-9°, n_D^{20} 1.5268 (max. at 730, 1595, 1650, 1675, 1710, and 3020 cm^{-1} in CCl_4), perchlorate m. 179-80° (EtOH). Heating 0.2 g. IV, 3 ml. mesitylene, and 0.5 g. 5% $\text{Pd}/\text{Al}_2\text{O}_3$ to the b.p., dilg. the cooled mixt. with Et_2O , removing the catalyst, and pptg. the filtrate with ethereal picric acid gave VII picrate, m. 135-6° (EtOH). Similarly, VI gave VIII, b_{14} 112-14°, picrate m. 166-6.5°

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(aq. EtOH) undepressed with a sample prepd. on hydrogenation of 8-methylquinoline methiodide, m. 182-2.5° (EtOH), in aq. AcOH on PtO₂ and pptn. with aq. Na picrate. Heating 0.7 g. VI, 4 ml. 95% HCO₂H, and 4 g. fused HCO₂K 5 hrs. at 160°, and working up as usual gave 0.5 g. 1,8-dimethyloctahydroquinoline (position of the double bond undetd.), b₁₅ 90-2°; picrate m. 171-2° (EtOH). Hydrogenation of aq. VI HCl salt on PtO₂ gave 75% 1,8-dimethyldecahydroquinoline, b₁₄ 100-2°; picrate m. 146-7° (EtOH). Keeping 3.3 g. I (b₆₂ 71-2°, purified via the perchlorate), 3 g. IX, and 20 ml. anhyd. dioxane 4 days at room temp. and distg. gave 3 g. mixt. of X and XI, b₁ 106-8° (max. at 1564, 1645, and 1730 cm.⁻¹ in CCl₄) and 1.6 g. XII, b₁ 170-90°, m. 79.5° (Et₂O) (max. at 1260, 1320, 1363, 1412, 1450, 1560, and 1625 cm.⁻¹ in CCl₄), picrate m. 176-6.5° (aq. EtOH). Redn. of 0.2 g. XII with 0.5 g. LiAlH₄ in Et₂O gave 0.18 g. 4-(γ-methylaminopropyl)cyclohexanone, b₈ 124-5° (max. at 1235, 1282, 1308, 1338, 1368, 1710, 2630, and 2700, and a band at 3200-400 cm.⁻¹ in CCl₄), picrate m. 170-1° (H₂O). Hydrogenation of the X and XI mixt. in EtOH on PtO₂ gave 94% mixt. of 1-methyl-3-(β-ethoxycarbonyl-ethyl)-2-pipecoline and 1-methyl-2-(γ-ethoxycarbonylpropyl)-piperidine, b₉ 128-30° (max. at 1740 cm.⁻¹ in CCl₄). This mixt. was reduced with LiAlH₄ in Et₂O to give 95% mixt. of the corresponding amino alcs., b₈ 135-6°, which (1.8 g.) was dissolved in 15 ml. aq. HBr, satd. with gaseous HBr and heated in a sealed tube 4 hrs. at 140-50°. Evapg. the soln. in vacuo, dilg. with 50 ml. H₂O, removing the Br ions with freshly prepd. Ag₂O, after 2 days evapg. the filtrate in vacuo to 5 ml., acidifying the residue with 15 ml. AcOH, dry distg. on a wire

Card 2/4

gauze, alkalinizing the distillate with aq. NaOH, steam distg., neutralizing the distillate with N HCl, evapg. to dryness in vacuo, and liberating the bases as usual gave an oil, b₈ 57-8.5°, n_D²⁰ 1.4760, which was pptd. with picric acid in Et₂O. Crystn. from EtOH gave 9-methyl-1-azabicyclo[1.3.3]nonane picrate, needles, m. 280° (aq. EtOH) (decompn.) [the base b₉ 56-7°], and quinolizidine picrate, leaflets, m. 195° (EtOH), in ratio 9:1. IV. Addition reaction of 1-methyl-2-alkyl-Δ²-pyrrolines with ethyl acrylate. Ibid. 1183-9.---Condensation of 1,2-dimethyl-Δ²-pyrroline (I) with Et acrylate (II) gave a mixt. of 1,2-dimethyl-3-(β-ethoxycarbonyl-ethyl)-Δ²-pyrroline (III), 1-methyl-2-(γ-ethoxycarbonylpropyl)-Δ²-pyrroline (IV), and a compd. C₉H₁₃NO, probably 1-methylhexahydro-Δ⁸-indol-4-one (V) or 1-methylhexahydro-Δ⁷-indol-6-one (VI). In several steps, the mixt. of III and IV gave 8-methyl-1-azabicyclo[1.2.3]octane (VII) and 6-coniceine (VIII) in the ratio 85:15. Condensation of 1-methyl-2-ethylidenepyrrolidine (IX) with II gave unexpectedly a compd. C₁₀H₁₇NO₂, probably 1,5-dimethyl-1-azacyclononane-2,6-dione (X) together with its intramolecular cyclization product, 1,5-dimethylhexahydro-Δ⁸-indol-4-one (XI). HCO₂H redn. of the X and XI mixt. gave 1,7-dimethyloctahydroindole (XII). Keeping 4 g. I, 4 g. II, and 20 ml. anhyd. dioxane 4 days at room temp. and distg. gave 3.95 g. mixt. of III and IV, b₁₀ 118-19° (max. at 1605, 1665, and 1740 cm.⁻¹), and 1.1 g. V or VI, b_{0.1} 138-41°, m. 106-7° (Et₂O) (max. at 1410 and 1605, and inflection at 1645 cm.⁻¹), picrate m. 161-2° (EtOH). Hydrogenation of the III and IV mixt. in EtOH on PtO₂ gave 88% mixt. of the corresponding satd. esters (b₉ 102-3°), which were reduced with LiAlH₄ in Et₂O to yield 91% mixt. of the corresponding amino alcs., b₈ 117-19°. Satg. at 0° 1.8 g. latter mixt. in 20 ml.

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aq. HBr with HBr, heating in a sealed tube 6 hrs. at 135-40°, evapg., treating the residue with 50 ml. H₂O and freshly prepd. Ag₂O to remove the Br ions, after 4 days filtering, evapg. the filtrate in vacuo to 5 ml., neutralizing the residue with 20 ml. AcOH, dry distg. the soln. [methopicate m. 310° (decompn.)] on a wire gauze, and working up the distillate by crystn. of the picrates in H₂O gave VII, b₃₀ 72-4°, picrate m. 315° (H₂O) (decompn.); VIII picrate m. 230-1°. Keeping 4.4 g. IX, 4 g. II, and 20 ml. dioxane 10 days at room temp. and distg. gave 4.9 g. X, b_{0.3} 125-8° (max. at 1415, 1455, 1515, 1580, 1625, 1740, and 2800 cm.⁻¹) which spontaneously changed into XI; picrate m. 153-4° (H₂O). Heating 2.5 g. X and XI mixt., 10 ml. 95% HCO₂H, and 10 g. fused HCO₂K 6 hrs. at 160-70° and working up as usual gave 1.5 g. XII, b₁₁ 72-3°, picrate m. 174.5-5.5° (H₂O). Dehydrogenation of XII on Pd/asbestos gave 72% 1,7-dimethylindole, b₉ 122-3°, m. 76.5-7.5° [picrate m. 151-2° (C₆H₆)] obtained (yield 43%) also (Ireland, CA 53, 2205h) by dehydrogenation (Pd/Al₂O₃ in mesitylene) of the unstable tetrahydrobase, b₁₄ 176°, prepd. (yield 70%) by keeping 3.3 g. IX, 1.1 g. acrolein, and 20 ml. dioxane 45 hrs. at room temp. and distg.

Jiri Pliml

(Retyped clipped abstract)

Card 4/4
jr

CERVINKA, O.

Reactions of enamines. V. Combining ethyl acrylate with 1-methyl-2-ethyl- Δ^2 -piperidine. Coll Cs chem 25 no.10:2675-2678 0 '60.
(EEAI 10:9)

1. Institut fur organische Chemie, Technische Hochschule fur Chemie,
Prag.

(Ethyl acrylate) (Tetrahydromethylpyridine)
(Amines) (Ethyl group)

CERVINKA, O.

Reactions of enamines. VI. Asymmetric reduction of 1-methyl-2-alkyl-
Δ²-piperidine-perchlorate with optically active alkoxylithium-
aluminumhydride. Coll Cz Chem 26 no.3:673-680 Mr '61.
(EEAI 10:9)

1. Institut für organische Chemie, Technische Hochschule für Chemie,
Prag.

(Alkyl groups) (Perchlorates) (Alkoxy groups)
(Aluminumlithium hydride) (Tetrahydromethylpyridine)

CERVINKA, O.; PELZ, K.; JIRKOVSKY, I.

Synthesis of the alkaloid of trachelanthamidine. Coll Cz Chem
26 no.12:3116-3122 D '61.

1. Institut fur organische Chemie, Technische Hochschule fur
Chemie, Prag 2.Jetziige adresse: Forschungsinstitut fur Pharmazie
und Biochemie, Prag (for Pelz and Jirkovsky).

CERVINKA, O.; BELOVSKY, O.

Synthesis of the alkaloid edulein. Coll Cz Chem 26 no.12:3181-3182 D '61.

1. Institut fur organische Chemie, Technische Hochschule fur Chemie, Prag.

CERVINKA, O.; FABRYOVA, A.; MATOUCHOVA, L.

Reactions of enamines. Pt.8. Coll Cs Chem 28 no.2:535-538
F '63.

1. Institut fur organische Chemie, Technische Hochschule fur
Chemie, Prag.

CZECHOSLOVAKIA

CERVINKA, O; BELOVSKY, O; ADAMEK, P.

1. Department of Organic Chemistry of the Institute of Chemical Technology, Prague; 2. Department of Special Analytic Methods of the Institute of Chemical Technology, Prague

Prague, Collection of Czechoslovak Chemical Communications,
No 10, 1965, pp 2462-3467

"Asymmetric Reactions. VIII. Ultra-Violet and Infra-Red Spectra of Methylaryl Ketones, Cyclohexylaryl Ketones and Diaryl Ketones."

GERVINKA, O.

Asymmetric reactions. Pts. 3, 5. Coll Cz Chem 30 no. 5: 1684-1692, 1738-1741 My '65.

1. Department of Organic Chemistry of the Institute of Chemical Technology, Prague. Submitted August 18 and September 1, 1964.

CERVINKA, O.; SUCHAN, V.; MASAR, B.

Asymmetric reactions. Pt.4. Coll Cz Chem 30 no.5:1693-1699
My '65.

1. Department of Organic Chemistry of the Institute of Chemical
Technology, Prague. Submitted August 18, 1964.

CERVINKA, O.; KRIZ, O.

Reactions of anamines. Pt.11. Coll Cz Chem 30 no.5:1700-1704
My '65.

1. Department of Organic Chemistry of the Institute of Chemical
Technology, Prague. Submitted August 18, 1964.

CERVINKA, O.; KATRITZKY, A.R.

Reactions of enamines. Pt.10. Coll Cz Chem 30 no.5:1736-1738 My '65.

1. Department of Organic Chemistry of the Institute of Chemical Technology, Prague. Submitted August 18, 1964.

CERVINKA, O.; FABRYOVA, A.; NOVAK, V.

Data on the configuration of S-(-)- δ -aminocaproic acid. Coll
Cz Chem 30 no.5:1742-1744 My '65.

1. Institut für organische Chemie, Technische Hochschule für
Chemie, Prague. Submitted September 22, 1964.

CERVINKA, O.

Once again on chemical orthography. Chem listy 59 no.3:356-357
Mr '65.

CZECHOSLOVAKIA

CERVINKA, O

Department of Organic Chemistry, Institute of Chemical
Technology, Prague

Prague, Collection of Czechoslovak Chemical Communications,
No 3, March 1966, pp 1571-1576

"Asymmetric Reactions. Part 9: Asymmetric transformation
as a means for determination of absolute configuration
of amines, amino alcohols, amino acids and amino sugars."

L 31203-66

ACC NR: AP6022553

SOURCE CODE: CZ/0008/66/000/001/0034/0050

AUTHOR: Cervinka, Otakar; Hub, Ladislav

ORG: Department of Organic Chemistry, College of Chemical Technology, Prague
(Katedra organické chemie, Vysoká škola chemicko-technologická)

TITLE: Steric course of enzymatic reductions

SOURCE: Chemické listy, no. 1, 1966, 34-50

TOPIC TAGS: enzyme, stereochemistry, redox reaction, pyridine, molecular structure, organic phosphorus compound

ABSTRACT: Stereospecific reactions are such reactions where a center of asymmetry is eliminated. The nature of asymmetric reactions is discussed. Mechanism of reduction by dehydrogenases containing in their molecule a pyridine nucleotide is described. Exchange reactions, and those that do not take place by direct transfer of a group in respect to their stereospecific nature are discussed. Steric relationships in enzymatic reductions are evaluated. It seems that that part of the molecule of an enzyme which is the basis of the substrate and product specificity is decisive in the nature of the reaction effected by a given enzyme.

Orig. art. has: 2 figures, 11 formulas and 2 tables. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 099

Cord 1/1 BLG

L 31590-66 RM

ACC NR: AP6022958

SOURCE CODE: CZ/0008/65/000/009/1058/1062

AUTHOR: Cervinka, OtakarORG: Department of Organic Chemistry, College of Chemical Engineering, Prague
(Katedra organické chemie, Vysoká škola chemicko-technologická)TITLE: Reduction of the pyridine ring by formic acid (Lukes reaction)

SOURCE: Chemické listy, no. 9, 1965, 1058-1062

TOPIC TAGS: pyridine, formic acid, chemical reduction

ABSTRACT: Pyridine is not reduced by formic acid, but the quaternary salts and their homologues are. When the quaternary salt is heated with formic acid and its K salt, a mixture of N-alkyl-1,2,5,6-tetrahydropyridine and N-alkyl- Δ^3 -piperidines is formed. As these can be easily separated the method is used at present for the preparation of N-alkyl- Δ^3 -piperidines. The mechanism of the reduction is described. The attack affects mainly the C₆ because the density of the electrons on this carbon is lower than on C₂. [JPRS]

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 012 / SOV REF: 001
OTH REF: 001Card 1/1 *BLG**0915**1042*

OSIVINKA, Stanislav

Construction of a large storage building in Strasnice.
Tech praca 16 no.2:94-96 F'64.

MAZAK, Jaroslav; ~~CERVINKA, Stanislav~~

Thirty-five years of modern building engineering. Tech praca 16 no.
10: 789-792 0 '64.

CERVINKA, Stanislav (Prague)

Electrical engineering and electric maintenance service in Poland.
Tech praca 17 no.3:185 Mr '65.

CERVINKA, Vaclav

water economy

DECEASED
c. '63

1964

CERVINSKI, P.

"Economic use of wood in the construction of galleries in coal mines and metallic deposits"

Buletin. Seria Shkencat Natyrore. Tirane, Albania. Vol. 12, no. 4, 1958

Monthly list of East European Accessions (EEAI), IC, Vol. 8, No. 6, Jun 59, Unclas

CERVA, Labor; CERVOVA, Helena

The occurrence of *Trichomonas intestinalis* in women and the relation of this infection to vaginal trichomoniasis. Cesk. epidem.mikrob.imun.10 no.2:128-133 Nr '61.

1. Krajska hygienicko-epidemiologicka stanice Stredoceskeho kraje; Ustredni hygienicko-epidemiologicka stanice WP v Praze.
(TRICHOMONAS INFECTIONS statist)
(VAGINA dis)

CERVSKY, J.

"Natural reservations of the German Democratic Republic. II. Biggest protected area on Muritz Lake and the Muritzhof school"

Ochrana Prirody. Praha, Czechoslovakia. Vol. 10, no. 6, July 1955

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclass

CERYCHOVA, Z.

An ear device for the photocolorimetry of live tissues.

P. 57, (Sbirke Vynalezu) Vol. 6, no. 3, Mar. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

HERDA, M., inz. CSc.; CESAK, K., inz.; WEBER, B., inz.; VYHNANEK, V., inz.;
KUNICKY, L., inz.; SIMEK, J., inz.; PROSTREDNIK, K., inz.

Maps for area planning and records of the built constructions.
Geod kart obzor 10 no.9/10:232-235 0 '64

CESAL, Miroslav

Chemical Abstracts
May 25, 1954
Sugar, Starch and Gums

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✓ Automatic molasses sampler. Miroslav Cesal & Vladimir
Valter. *Listy Cukrovar.* 69, 201(1953).—An app. is de-
scribed of very simple construction for use by nontech. per-
sonnel. Jos. Lederer

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E073/E535

AUTHORS: Turek, Z., Engineer and Česánek, J.
TITLE: Application of radioisotopes in research on machining
PERIODICAL: Strojírenství, 1961, Vol.11, No.9, pp.682-688
TEXT: Detailed information is given on testing the wear of cutting tips by using radioactive tungsten. Due to its very short half-life (24.1 hours), the experiments must be carried out within the shortest possible time. However, the short half-life facilitates handling of the wastes after the tests. In the experiments, a current lathe was used which was suitably adapted and fully enclosed. A sketch of the cutting tool with the mechanically held carbide tip is shown in Fig.3. The tool geometry is as follows: rake angle $\gamma = 10^\circ$; back angle $\alpha = 5^\circ$; setting angle $\kappa = 60^\circ$; backing off angle $\lambda = 4^\circ$; tip angle $\epsilon = 90^\circ$, angle of lands $\gamma_f = -5^\circ$, land width $f = 0.2$ mm. The radioactive carbide tip is fitted into the holder by means of a manipulator in a special jig, which is provided with a protective cover. The machined material is circular and is clamped as shown in Fig.5. The geometrical shape of the machined material is such that, on

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machining off a layer of a certain thickness, the volume of the machined off material is the same at the various diameters. All the chips and all the products of the wear of the tool are caught inside a cover surrounding the piece being machined. The process of blunting of carbide tipped tools can be subdivided into three stages: initial accelerated blunting, uniform blunting at a normal rate and final avalanche type blunting. In the experiments, a certain amount of preliminary blunting (for 8 to 15 min) was carried out so that the experiments themselves are in the range of uniform blunting. The number of pulses obtained by a scintillator depends to a large extent on the geometrical shape of the chip specimens and on the position of the scintillator. For specimens of six differing shapes, the frequency of pulses per 1 g of chips varied between 26 and 53. In the tests cylindrical specimens of 72 mm diameter, 10 mm thick, weighing 100 g were used. These were chosen due to their simplicity, easy and quick preparation and also because they provided a sufficiently large pulse frequency. Fig.10 shows the characteristic wear obtained for the Czech carbide S 1 in the machining of the steel 12 O60.1 ($v = 160$ m/min, $s = 02$ mm/rev, Card 2/6

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t = 2 mm). Curve a gives the wear at the back of the tool b_h , mm as a function of time, determined from a sequence of photographs, curve b shows the results obtained from measuring the radiation activity (total number of pulses), also as a function of time. Fig.11 shows the rate of blunting of the same carbide tip as referred to in Fig.10 (pulses/min vs. time, min and quantity of chips, kg). It can be seen that the method is sufficiently sensitive to give information on the rate of blunting in a much shorter time than is possible by means of an optical microscope. About 5% of the total worn off material stuck to the machined surface. Since the quantity of the tool material on the machined surface is relatively small, it can be disregarded. The dust precipitated on the walls of the cover amounted to an average of 14% of the total tool wear. Analysis of the distribution and scatter of the results for various materials led to the preliminary conclusion that during the further machining tests only the fraction which adheres to the chips will be measured. Standard type machineability tests take a long time and VUOSO developed and tested a short-time method of testing the machineability which is

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based on the assumption that even the initial accelerated blunting is proportional to their final blunting. Accordingly, the machining on the lathe is carried on for a shorter time to achieve a smaller blunting and, in the same way as in current type tests, the machining speeds are compared. The machineability of a certain material is determined by reference to a comparison material, i.e. by the ratio of the machining speed of the investigated material, v_{60} , and the machining speed of the corresponding reference material, v_{60r} , to obtain the same tool life. In the case of tests with radioisotopes the same principle is applied, i.e. the coefficient of machineability is determined from the ratio of the pulses generated by the chips of the reference material to the frequency of the pulses from the chips of the test material. It is stated that the machineability coefficients determined from the pulse frequencies (average values from five measurements) are in good agreement with the respective values determined from the machining speed in short duration tests. The tests based on optically determined machineability only take into consideration the wear on the back of the tool, whilst the radioisotope method

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CESANEK, J.

"Radioactive isotopes in examining the wear of cutting tools" by
N.F. Kazakov. Reviewed by J. Cesanek. Jaderna energie 9 no.3:
107 Mr '63.

CESANEK, Jaroslav; VINTNER, Frantisek, inz.

Twist drills with a centering point. Stroj vyr 13 no.4:242-
244 Ap '65.

1. Research Institute of Machine Tools and Machining, Prague.

CESANY, V.

TECHNOLOGY

Periodical: POZEMNI STAVBY. Vol. 6, no. 10, Oct. 1958.

CESANY, V. All-wall slag concrete partitions with reed rods. p. 580.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.

CESAR, Frantisek

Observations on the suggestions of raising the standard of
design work in mechanical engineering. Podn org 18 no. 6:
262-263 Je '64.

1. Totex, Chrastava.

CESAREC, Rudolf

Cesarec, Rudolf. Sur la détermination des asymptotes en coordonnées projectives. Hrvatsko Prirodoslovno Društvo. Glasnik Mat-Fiz. Astr. Ser. II. 4, 49-69 (1949). (Translation. French summary)

La notion d'asymptote d'une courbe définie en coordonnées projectives ressortissant à la géométrie affine, il n'est pas possible, par les seuls moyens de la géométrie projective, de les déterminer analytiquement. L'auteur y parvient par l'introduction de trois grandeurs a_1, a_2, a_3 qui sont des constantes affines du triangle de référence. Il applique sa méthode aux coniques, courbes pour lesquelles il montre comment on peut déterminer, non seulement les asymptotes, mais aussi les diamètres conjugués, et en particulier les axes. En ce qui concerne les deux paraboles contenues dans un faisceau linéaire donné, il montre comment on peut en effectuer la détermination, et précise la condition d'égalité de ces deux paraboles. Comme nouvel exemple de détermination des asymptotes il envisage la cubique $x_1x_2x_3(x_1-x_2)+x_1x_2x_3(x_2-x_3)+x_1x_2x_3(x_3-x_1)=0$, et développe les calculs dans un cas numérique. La fin de l'article donne quelques indications sur la possibilité d'étendre à l'espace les résultats obtenus dans le plan.

P. Vincensini (Marseille).

Source: Mathematical Reviews,

Vol. 11, no. 1

Cesarec, Rudolf: On the determination of asymptotes in projection coordinates

CESAREC, RUDOLF

Mathematical Reviews
Vol. 14 No. 9
October 1953
Geometry

8-10-54
LL

Cesarec, Rudolf. On circular rational curves of the 4th
order derived from certain conoids. Rad Jugoslav.
Akad. Znan. Umjet. Odjel Mat. Fiz. Tehn. Nauke 276,
39-82 (1949). (Serbo-Croatian)

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2

2

CESAREC, RUDOLF

Mathematical Reviews
Vol. 14 No. 9
October 1953
Geometry

Cesarec, Rudolf. Sur les quartiques planes unicursales
circulaires, dérivées des certains conoides. Bull. Inter-
nat. Acad. Yougoslave. Cl. Sci. Math. Phys. Tech. (N.S.)
5, 9-23 (1952).
An abbreviated version of the paper listed above.

CESAREC, Rudolf

①
✓ Cesarec, Rudolf. Über die Inzidenzgleichung in nicht-
zusammengehörigen projektiven Koordinaten. Hrvatsko
Prirodoslovno Društvo. Glasnik Mat.-Fiz. Astr. Ser. II.
8, 168-174 (1953). (Serbo-Croatian. German sum-
mary)

CESAREC, R.

The Two-Part Curves of the Third Order Produced Through Involution With Relation to the Entire Quadrangle

Cesarec, Rudolf. Die zweitheiligen Kurven dritter Ordnung, erzeugt durch Involution inbezug auf das vollständige Viereck. Bull. Internat. Acad. Yougoslave. Cl. Sci. Math. Phys. Tech. 5 (1955), 59-74.

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